

APR/FY06

**FORT GEORGE G. MEADE
and
PHOENIX MILITARY
RESERVATION
Maryland**

**Army Defense Environmental
Restoration Program
Installation Action Plan**

Final 26 July 2006

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Statement of Purpose

The purpose of the Installation Action Plan (IAP) is to outline the total multi-year Cleanup Program for an installation. The plan identifies environmental cleanup requirements at each site or area of concern, and proposes a comprehensive, installation-wide approach, with associated costs and schedules, to conduct investigations and necessary remedial actions.

In an effort to coordinate planning information between the restoration manager, US Army Environmental Center (USAEC), Fort George G. Meade and Phoenix Military Reservation, executing agencies, and regulatory agencies, an IAP was completed. The IAP is used to track requirements, schedules and tentative budgets for all Army installation cleanup programs.

All site-specific funding and schedule information has been prepared according to projected overall Army funding levels and is, therefore, subject to change.

The following agencies contributed to the formulation and completion of this Installation Action Plan during a planning workshop held on 26 April 2006:

BAE for USAEC
DPW - EMO
Engineering & Environment, Inc. for USAEC
MDE
US Army Corps of Engineers
US Environmental Protection Agency, Region III
USAEC

Acronyms & Abbreviations

AEDB-R	Army Environmental Database - Restoration
AST	Aboveground Storage Tank
bgs	below ground surface
BLDG	Building
BRAC	Base Realignment and Closure
CAP	Corrective Action Plan
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CRC	Crime Record Center
CSL	Closed Sanitary Landfill
CTC	Cost-to-Complete
cy	cubic yards
DC	District of Columbia
DD	Decision Document
DDD	Dichlorodiphenyldichloroethane
DDT	Dichlorodiphenyltrichloroethene
DERA	Defense Environmental Restoration Account
DES	Design
DOL	Directorate of Logistics
DPW	Directorate of Public Works
DRMO	Defense Reutilization and Marketing Office
EMO	Environmental Management Office
EOD	Explosive Ordnance Disposal
ER,A	Environmental Restoration, Army
FGGM	Fort George G. Meade
FS	Feasibility Study
FY	Fiscal Year
IAP	Installation Action Plan
IMA	Installation Management Agency
IMP(C)	Implementation (Construction)
IMP(O)	Implementation (Operation)
INV	Investigation
IRA	Interim Remedial Action
IRP	Installation Restoration Program
ISC	Initial Site Characterization
K	thousand
LOC	Library of Congress
LTM	Long-Term Management
MCL	Maximum Contaminant Level
MD	Maryland
MDE	Maryland Department of the Environment
MEC	Munitions and Explosives of Concern
MMRP	Military Munitions Response Program
MNA	Monitored Natural Attenuation
NCP	National Contingency Plan

Acronyms & Abbreviations

NFA	No Further Action
NOV	Notice of Violation
NPL	National Priorities List
OMA	Operations and Maintenance – Army
PA	Preliminary Assessment
PAH	Poly Aromatic Hydrocarbons
PBC	Performance-Based Contract
PCB	Polychlorinated Biphenyl
PCE	Tetrachloroethylene
PMR	Phoenix Military Reservation
POL	Petroleum, Oil & Lubricants
POM	Program Objective Memorandum
ppb	parts per billion
RA	Remedial Action
RAB	Restoration Advisory Board
RAC	Risk Assessment Code
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operation)
RBC	Risk Base Concentrations
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
REM	Removal
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RI	Remedial Investigation
RIP	Remedy-in-Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Investigation
SVOC	Semi-Volatile Organic Compounds
SWMU	Solid Waste Management Unit
TCE	Trichloroethylene
TPH	Total Petroleum Hydrocarbons
TPH-DRO	Total Petroleum Hydrocarbons - Diesel Range Organics
USACE	United States Army Corps of Engineers
USAEC	United States Army Environmental Center
USATHAMA	United States Army Toxic and Hazardous Material Agency (now USAEC)
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
UXO	Unexploded Ordnance
VOC	Volatile Organic Compounds
WP	White Phosphorous
WWII	World War Two

Installation Information

Installation Locale: Fort Meade is located on approximately 5,142 acres of land in Anne Arundel County, Maryland, midway between Baltimore, MD and Washington, DC. The facility is located southeast of the Baltimore-Washington Parkway, north of Maryland Route 32, and west of Maryland Route 175, approximately 28 miles from Fort McNair, DC.

Installation Mission: Provides base operations support for facilities and infrastructure, quality of life and protective services in support of Department of Defense activities and Federal agencies.

Lead Organization:

Installation Management Agency, Northeast Region

Lead Executing Agencies:

Investigation Phase Executing Agency: USAEC, US Army Corps of Engineers (USACE), Baltimore District and Fort Meade

Remedial Action Phase Executing Agency: Fort Meade and USACE, Baltimore District

Regulatory Participation:

Federal: US Environmental Protection Agency (USEPA) Region III

State: Maryland Department of the Environment (MDE)

National Priorities List (NPL) Status: Since 1998, the USEPA has listed Fort Meade on the National Priorities List based on the hazard ranking scores of the Defense Reutilization and Marketing Office (DRMO) Drum Site (FGGM 07), Landfill (FGGM 17), Post Laundry Facility (FGGM 47) and the Clean Fill Dump (FGGM 81-BRAC). RCRA oversight has been deferred; all future action will be taken pursuant to CERCLA and the NCP at Installation Restoration Sites.

Projected Dates for Construction Completion: To be addressed at future IAP Workshops.

Projected Date for NPL Removal: To be addressed at future IAP Workshops.

Installation Restoration Advisory Board (RAB)/Technical Review Committee/Technical Assistance for Public Participation (TAPP) Status: A RAB was established in March 1995.

Installation Program Summaries

IRP

Primary Contaminants of Concern: #2 Fuel Oil, PCE, VOCs, SVOCs, PAH, TPH, Inorganics, Metals, Pesticides

Affected Media of Concern: Groundwater, Soil, Soil Gas, Surface Water, Sediment

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 2008/2023

Funding to date (up to FY05): \$76,880.82K

Current year funding (FY06): \$4,154.07K

Cost-to-Complete (FY07+): \$15,002K

MMRP

Primary Contaminants of Concern: MEC, Metals

Affected Media of Concern: Soil

Estimated Date for RIP/RC: 2017

Funding to date (up to FY05): \$4,840.7K

Current year funding (FY06): \$ 28K

Cost-to-Complete (FY07+): \$ 3,496K

Cleanup Program Summary

Installation Historic Activity

Fort George G. Meade (FGGM) originally was authorized by Congress in 1917 as one of sixteen training cantonments to be built for troops drafted during World War I. It became a permanent military reservation in 1928. During the First World War, more than 100,000 troops were trained at the installation. Subsequently, World War II brought 3.5 million men and women to FGGM for training in different phases from 1940 to 1946. At various times since 1946, FGGM has been involved in the mission of training troops.

FGGM is a permanent US Army installation situated in the northwest corner of Anne Arundel County, Maryland. Anne Arundel County is located in central Maryland on the western shore of the Chesapeake Bay estuary. Nearby communities include Odenton, Severn, Jessup, and Laurel. FGGM is close to the border of Howard County on the west and Prince Georges County on the south. FGGM is located almost equidistant (12 miles) between Baltimore, MD and Washington, DC. FGGM is located in a region of significant population. The resident and working populations of FGGM approach 50,000.

Subsequent to the Resource Conservation and Recovery Act (RCRA) Hazardous and Solid Waste Amendments of 1984, FGGM applied for a Part B Permit. In accordance with RCRA provisions, FGGM began investigating its potential solid waste management units (SWMU) in 1987. At the same time, a site investigation began at the active sanitary landfill to determine what, if any, impacts the landfill had on local groundwater.

In 1988, Public Law 100-526, Base Realignment Closure and Act, identified Fort Meade for realignment to an administrative installation and to excess approximately 9,000 acres used for training. Since that time, Fort Meade has successfully and actively participated in developing the RAB in an effort to keep the surrounding community abreast of restoration activities.

As a result of Base Realignment and Closure (BRAC), CERCLA, and RCRA statutes, Fort Meade has remedial actions on-going in the base closure account and Environmental Restoration, Army (ER,A) account. The installation was placed on the Federal Agency Hazardous Waste Compliance Docket in 1989, after issuance of the Part B Permit. As of 28 July 1998, Fort Meade was added to the NPL. This listing was based on a 1 April 1997 proposal by the USEPA.

At the end of FY01, a number of SWMUs remained to be reviewed by the Installation/USEPA/State regulator Tier I Partnering team. As of FY03, some of these SWMUs have been geographically consolidated and assigned AEDB-R designations. Currently, 15 AEDB-R sites are under investigation. Completion of Remedial Investigations at all 15 sites is anticipated by the end of FY07.

Fort Meade is also responsible for the Phoenix Military Reservation (PMR). The PMR is a former Nike Fire Control Area, which historically operated from 1955-1972. The Maryland National Guard used the PMR for training from 1972 to the 1980s. Historical operations have resulted in environmental impacts at the PMR. Groundwater contamination is present on- and off-site. A Remedial Investigation is underway. Remedial action at the PMR is anticipated.

Cleanup Program Summary

IRP

- Prior Year Progress: Performance Based Contract (PBC) awarded in FY05 includes sites FGGM-05, 07, 47, 83, 86, 87, 88, 89, 90, 91, 92
- Future Plan of Action: Complete the RI for Manor View (FGGM 93) in FY07. Begin the FS for the Closed Sanitary Landfill (FGGM 17). Complete the RI and begin the FS for the Former Pesticide Shop in FY07 (FGGM 13).
The following milestones in PBC will be achieved in:
FY07 – RIP/RC Trap and Skeet Range (FGGM 83)
– ROD/DD for seven sites (FGGM 86, 88, 89, 90, 91, 92, and 47)
FY08 – RIP for the Former Nike Control Site (FGGM 87) and DRMO drum site (FGGM 07)

MMRP

- Prior Year Progress: The Range Inventory/PA was completed in May 2003 and the site investigation is scheduled for initiation in FY06.
- Future Plan of Action: Complete MMRP Site Inspection in FY07. Complete annual Long Term Monitoring activities for Inactive Landfill 2 (FGGM-007-R-01).

FORT GEORGE G. MEADE and PHOENIX MILITARY RESERVATION

Installation Restoration Program

Total AEDB-R IRP Sites / AEDB-R sites with Response Complete:

FGGM: 36/26 (this includes PMR: 4/3)

Different Site Types:

11 Contaminated Buildings (2 PMR)	1 Contaminated Fill	1 Incinerator
2 Contaminated Groundwater	1 Surface Disposal Area	3 Landfills
1 Disposal Pit/Dry Well	2 Maintenance Yards	5 Storage Areas
1 Waste Treatment Plant	3 Spill Site Areas	1 UST (PMR)
1 Waste Line (PMR)	1 Soil Contamination after Tank Removal	
1 Other		
1 Industrial Discharge (PBC Funds-Tracking Site)		

Most Widespread Contaminants of Concern: #2 Fuel Oil, PCE, VOCs, SVOCs, PAH, TPH, Inorganics, Metals, Pesticides

Media of Concern: Groundwater, Soil, Soil Gas, Surface Water, Sediment

Completed Removal (REM)/Interim Remedial Action (IRA)/Remedial Action (RA):

- RA - Troop Boiler Plant (FGGM 05) pump & treat system recovering POL, FY92-96, \$972K VENC, FY97, \$88K, FY98, \$94K
- REM - DRMO Drum Site (FGGM 07) drum and transformer removal, FY95, \$750K VENC.
- RA - DRMO Drum Site (FGGM 07), FY96, \$435K, DERA, FY97 \$20K + \$176K, FY98, \$745,792
- RA - Landfill Cell #1 (FGGM 17) construct leachate collection system, FY93, \$60K, VENC. Cap installation, gas vent system, fill, FY94-95, \$9764K DERA; FY96 \$467K DERA, FY97 \$346K, FY98, \$5,610,567
- REM - Battery Shop (FGGM 33) contaminated soil & tank removed, FY92, \$207K VENC.
- REM - USTs (FGGM 75) 309 USTs & contaminated soil removed, FY91-95 \$846K VENC, FY95 \$303K, AFH.

Total IRP Funding

Prior years (up to FY05):	\$76,880.82K
Current year funding (FY06):	\$ 4,154.07K
Future Requirements (FY07+):	<u>\$15,002.00K (includes PMR: 1,110K)</u>
Total:	\$96,036.89K

Duration of IRP

Year of IRP Inception: 1991

Year of IRP RIP/RC: 2008/2023

Year of IRP Completion including Long-Term Management (LTM): 2036

IRP Contamination Assessment

IRP Contamination Assessment Overview

In 1980, United States Army Toxic and Hazardous Material Agency (USATHAMA – now USAEC) completed its initial installation assessment for Fort Meade. This assessment identified the need for a site investigation for the active sanitary landfill. No further action was taken until 1987 when USATHAMA updated the 1980 assessment to verify conditions at Fort Meade and determine the next steps to be taken. In 1988, USATHAMA began a preliminary assessment of the active sanitary landfill. In FY94, ER,A funds were obtained to complete the cap on cell #1 of the landfill and OMA funds for the liner of active cell #2. All restoration work to date, besides the landfill, was done with OMA funds. Contaminants found in the landfill area include heavy metals, chlorinated solvents, and non-chlorinated solvents.

As of 28 July 1998, Fort Meade was added to the NPL. This listing was based on a 1 April 1997 proposal by the USEPA.

The PMR is contaminated with low levels of chlorinated solvents in groundwater. Response action is anticipated at this parcel.

IRP Cleanup Exit Strategy

Continue to perform actions outlined in the IAP contingent on funding levels. A Performance-Based Contract was awarded in May 2005 that covers AEDB-R sites FGGM 05, 07, 47, 83, 86, 87, 88, 89, 90, 91, and 92.

Undated

- Draft Work Plan for Ordnance Survey of 7600 acre Department of Interior Parcel., Undated
- Concept Design of the Cover, Leachate & Gas Collection Systems for FGGM, Undated

1977

- Environmental Impact Statement - Existing Activities and Conditions, 8 Jun-77

1979

- Landfill Study, 18-26 Jun-79

1980

- Final - Installation Assessment of FGGM, 3-7 Nov-80

1981

- Final - Overall Environmental Impact Statement, Aug-81

1987

- Final - Update of the Initial Installation Assessment of FGGM and Gaithersburg Research Facility, Dec-87

1989

- Final - Site Safety & Health Plan for Remedial Investigation at FGGM Landfill and Preliminary Assessment/Site Investigation at the Former Gaithersburg Nike Control and Launch Areas, Mar-89
- Draft - Task Order 2 Preliminary Assessment for Fort Holabird, Dec-89

1990

- USATHAMA Task Order 2 Enhanced Preliminary Assessment Fort Holabird Crime Records Center, Jan-90
- Preliminary Draft - Environmental Assessment - Base Closure at Gaithersburg, MD, 15-Feb-90
- Technical and Sampling/Analysis Plan, U.S. Army Toxic and Hazardous Material Agency, EA Engineering, Feb-90
- Site Safety and Health Plan for Remedial Investigation/Feasibility Studies at FGGM Landfill and Preliminary Assessment/Site Investigation at Former Gaithersburg Nike Control and Launch areas, Mar-90
- Draft - USATHAMA - Appendices for FGGM Active Sanitary Landfill and Clean Fill Dump Remedial Investigation Report, Apr-90
- Final - Gaithersburg Research Facility Control Area Site Investigation - Accident Prevention Safety Plan, May-90
- USATHAMA - Appendices for FGGM Active Sanitary Landfill and Clean Fill Dump Remedial Investigation Report, Aug-90
- Final - Public Involvement and Response Plan, Sep-90

1990 (cont.)

- Preliminary Assessment Report FGGM - Hazardous Substances Identification and Storage and Potential Receptors for Groundwater, Surface Water and Onsite Pathways, 1-Nov-90
- Preliminary Assessment Report, US Army Toxic and Hazardous Material Agency, Roy F. Weston, Inc., Nov-90
- Draft Final Document - USATHMA Technical Report for Proposed Ordnance Clearance at FGGM, Dec-90
- Draft Final - Gaithersburg Appendices Final Project Report, Dec-90

1991

- Final - Remedial Investigations/Feasibility Studies for Proposed Ordnance Clearing at FGGM, Mar-91
- Draft Final Document - USATHAMA Ordnance Clearance Survey, Mar-91
- Final - Gaithersburg Research Facility Central Area Site Inspection, Mar-91
- Draft - Comprehensive Base Realignment and Partial Closure for FGGM & Fort Holabird, Mar-91
- Final - Gaithersburg Project Report Appendices, Mar-91
- Volatile Analysis - Fort Meade Laundry Analytical Data Package, 8-13 Aug 91
- Environmental Investigation for Property Transfer - Fort Holabird Crime Records Center Environmental Investigation and Alternatives Assessment, Sep-91
- Draft - Addendum Site Health and Safety Plan Ordnance Clearance Survey, 1-Nov-91
- Review of Draft Work Plan for Ordnance Survey of 1,400 Acres - Department of Interior Parcel, 4-Dec-91
- Post Laundry Facility Contaminant Assessment Report, 6-Dec-91
- Post Laundry Facility Contaminant Assessment Report, Versar, 6-Dec-91

1992

- Final - Preliminary Assessment Report Addendum for FGGM, Mar-92
- Preliminary Assessment Report Addendum, US Army Toxic and Hazardous Material Agency, Roy F. Weston, Inc., Mar-92
- Final Environmental Investigation Report for Fort Holabird Crime Records Center, 31-Mar-92
- Work Plan for Unexploded Ordnance Clearance Survey at FGGM, Apr-92
- Accident Prevention and Safety Plan - FGGM Ordnance Clearance Survey, Apr-92
- Site Health and Safety Plan - FGGM Ordnance Clearance Survey, 5-Jun-92
- Work Plan - FGGM Ordnance Clearance Survey, 8-Jun-92
- Draft Report for Asbestos Investigation and Estimation of Fort Holabird Crime Records Center (CRC), 15-Sep-92
- Site Inspection, Volumes I - III - Ordnance Demolition Area, Clean Fill Dump, Fire Training Area, Inactive Landfill No. 1, Inactive Landfill No. 2, Inactive Landfill No. 3, DPDO Salvage Yard, US Army Toxic and Hazardous Material Agency, EA Engineering, Oct-92
- Asbestos Investigation and Estimation of Fort Holabird Crime Records Center, 29-Oct-92

1992 (cont.)

- Remedial Investigation Report and Appendices - Active Sanitary Landfill and Clean Fill Dump, U.S. Army Toxic and Hazardous Material Agency, EA Engineering, Science and Technology, Inc., Dec-92

1993

- Work Plan Feasibility Study and Remedial Investigation/Site Inspection RI/SI Addendum - Inactive Landfill No. 2, DPDO Salvage Yard and Transformer Storage, Helicopter Hangar Area, Fire Training Area, Ordnance Demolition, Active Sanitary Landfill, Clean Fill Dump, USAEC, Arthur D. Little, 19-Nov-93
- Quality Control Plan Feasibility Study and Remedial Investigation/Site Inspection RI/SI Addendum, USAEC, Arthur D. Little, 19-Nov-93
- Health and Safety Plan, Feasibility Study and Remedial Investigation/Site Inspection Addendum - Inactive Landfill No. 2, DPDO Salvage Yard and Transformer Storage, Helicopter Hangar Area, Fire Training Area, Ordnance Demolition, Active Sanitary Landfill, Clean Fill Dump, U.S. Army Environmental Center, Arthur D. Little, 19-Nov-93
- Health & Safety Plan - DRMO, USAEC, Arthur D. Little, 19-Nov-93
- Work Plan, Feasibility Study and Remedial Investigation/Site Inspection Addendum - Inactive Landfill No. 2, DPDO Salvage Yard and Transformer Storage, Helicopter Hangar Area, Fire Training Area, Ordnance Demolition, Active Sanitary Landfill, Clean Fill Dump, USAEC, Arthur D. Little, 19-Nov-93
- Quality Control Plan Feasibility Study and Remedial Investigation/Site Inspection RI/SI Addendum, USAEC, Arthur D. Little, 19-Nov-93

1994

- Architect of Capitol - Initial Phase I Report, Site Assessment of 100-Acre Parcel, Rummel, Klipper & Kahl, 19-May-94
- Ordnance Survey Report, 1400 Acre Parcel - 500-acre Dept. of Interior Parcel, Tipton Army Airfield Parcel, Active Sanitary Landfill Parcel, USAEC, International Technology Corp., Jun-94
- Cell 2 Modifications - Active Sanitary Landfill, 11-Aug-94
- Initiation of Detection Monitoring Program - Active Sanitary Landfill, U.S. Army Center for Health Promotion and Preventive Medicine, Sep-94
- Feasibility Study Report - Active Sanitary Landfill, USAEC, Arthur D. Little, 16-Sep-94
- Residential Wells Data - Active Sanitary Landfill, USAEC, Arthur D. Little, 13-Oct-94
- DRMO - Final Quality Control Plan Remedial Investigation/Feasibility Study, USAEC, Engineering Technologies Associates, Inc., 30 Dec-94, May-95

1995

- DRMO - Quality Control Plan Remedial Investigation and Feasibility Study of the Defense Property Disposal Office, USAEC, Engineering Technologies Associates, Inc., 01-May-95
- DRMO - Technical Work Plan Remedial Investigation/Feasibility Study, USAEC, Engineering Technologies Associates, Inc., May-95
- Post Laundry Facility - Safety & Health Program Site Specific Safety and Health Plan, Subsurface Investigation, Versar, Inc., 02-Jun-95

1995 (cont.)

- DPDO Sample Analysis Report – GP Work Order #9508083, Baltimore District Corps of Engineers, 25-Aug-95
- DPDO Semi-volatile Package, Baltimore District Corps of Engineers, 11-Sep-95
- DRMO - Semivolatile Package, GP Environmental Services, Inc., 11-Sep-95
- DPDO Sample Analysis Report - GP Work Order #9509006, Baltimore District Corps of Engineers, 13-Sep-95
- DPDO Metals Package, Baltimore District Corps of Engineers, 18-Sep-95
- Metals Package Metals Case Narrative, GP Environmental Services, Inc., 18-Sep-95
- Post Laundry Facility Additional Subsurface Investigation Activities MDE Case # c-0094-132, 27-Sep-95
- Post Laundry Facility - Additional Subsurface Investigation Activities, Versar, Inc., 27-Sep-95
- DPDO Sample Analysis Report – GP Work Order #9508056, Baltimore District Corps of Engineers, 5-Oct-95
- DPDO Sample Analysis Report – GP Work Order #9508022, Baltimore District Corps of Engineers, 5-Oct-95
- DPDO Sample Analysis Report – GP Work Order #9508018, Baltimore District Corps of Engineers, 9-Oct-95
- Sample Analysis Report – GP Work Order #9508037, Baltimore District Corps of Engineers, 9-Oct-95
- Site Inspection Addendum Report - Defense Reutilization And Marketing Office Inactive Landfill No. 2 Helicopter Hangar Area Fire Training Area Ordnance Demolition Soldiers Lake, USAEC, Arthur D. Little, Dec-95

1996

- Solid Waste Management Unit Study, BCM Engineers, Jun-96
- 1996 Active Sanitary Landfill Annual Detection & Assessment Monitoring Report, CH2MHill, Aug-96
- DPDO Draft Final, Phase One HTRW (SCAPS) Investigation, Baltimore District Corps of Engineers, Dec-96
- DRMO - Sampling Report Environmental Sampling Activities, USACE, Dec-96

1997

- Clean Fill Dump Preliminary Data (surface soils, sediment, groundwater) Provided to BRAC Clean-up Team (USEPA R3 and State), January 16, 1997, provided to RAB, 12-Feb-97
- DPDO Environmental Sampling Covered Storage Facility, Baltimore District Corps of Engineers, Mar-97
- DRMO - Environmental Sampling, USACE, Mar-97
- Post Laundry Facility comprehensive Site Assessment, Versar, 5-Mar-97
- DPDO Final Report, Phase One HTRW (SCAPS) Investigation, Baltimore District Corps of Engineers, Apr-97
- Draft, Active Sanitary Landfill Off-Post Drilling and Sampling Results and Surface Water Sampling Results Fort Meade Feasibility Study and Remedial Investigations/Site Inspection, Arthur D. Little, Apr-97

1997 (cont.)

- Post Laundry Facility - Additional Subsurface Investigation Activities, USACE, Apr-97
- DRMO - Phase One HTRW (SCAPS) Investigation, USACE, Apr-97
- Remedial Investigation Addendum - Active Sanitary Landfill, USAEC, Arthur D. Little, May-97
- Draft, Active Sanitary Landfill Atrazine Study Fort Meade Feasibility Study and Remedial Investigation/Site Inspection, Arthur D. Little, Jun-97
- 1997 Active Sanitary Landfill Semi-Annual Detection & Assessment Monitoring Report, CH2MHill, Aug-97
- 1997 Active Sanitary Landfill Annual Detection & Assessment Monitoring Report, CH2MHill, Aug-97
- DRMO - Response to Specific Comments-USEPA, 08-Aug-97
- DRMO - Response to Specific Comments-MDE, 12-Aug-97
- DRMO - Work Plan Phase Two HTRW Investigation, USACE, Sep-97

1998

- Comment-Response Package for Off-Post Drilling Report - Active Sanitary Landfill, USAEC, Arthur D. Little, 1-Mar-98
- DRMO - Summary Report, Drilling & Testing Activities, Phase II Groundwater Investigation, USACE, Dames & Moore, 09-Apr-98
- Post Laundry Facility Comprehensive Site Assessment, Versar, 15-Jun-98
- 1998 Active Sanitary Landfill Semi-Annual Detection & Assessment Monitoring Report, CH2MHill, Oct-98
- Industrial Corridor Risk Assessment, Versar, 16-Dec-98

1999

- Atrazine Study Feasibility Study and Remedial Investigation Site Inspection - Active Sanitary Landfill, Arthur D. Little, USAEC, Mar-99
- Off-Post Drilling and Sampling Results and Surface Water Sampling Results Feasibility Study and Remedial Investigation/Site Inspection - Active Sanitary Landfill, Clean Fill Dump, USAEC Arthur D. Little, Mar-99
- Groundwater Database Report - Active Sanitary Landfill, USACE, Malcolm Pirnie, Mar-99
- Post Laundry Facility - January 1999 Quarterly Groundwater Sampling Results, Versar, Inc., 1-Mar-99
- Comprehensive Site Assessment - Former Incinerator Building 21-1/2 Street, Versar, Inc., 8-Jun-99
- Comprehensive Site Assessment - Former Battery Disposal Facility Morrison Street, Versar, Inc., 8-Jun-99
- Former Trap And Skeet Range (20th Street) - Comprehensive Site Assessment, Versar, Inc., 10-Jun-99
- Post Laundry Facility - May 1999 Quarterly Groundwater Sampling Results, Versar, Inc., 24-Jun-99
- RCRA Facility Assessment, CH2MHill, Sep-99

1999 (cont.)

- Sampling Visits Solid Waste Management Units Vol III, Versar, Inc., Sep-99
- Sampling Visits Solid Waste Management Units Vol IV, Versar, Inc., Sep-99
- Sampling Visits Solid Waste Management Units Vol V, Versar, Inc., Sep-99
- Sampling Visits Solid Waste Management Units Vol VI, Versar, Inc., Sep-99
- Sampling Visit - Building 8881, Versar, Inc., 13-Sep-99
- Sampling Visits Solid Waste Management Units Vol I, Versar, Inc., 16-Sep-99
- Sampling Visits Solid Waste Management Units Vol II, Versar, Inc., 16-Sep-99
- Public Health Assessment, Dept. of Health & Human Services, Agency for Toxic Substances and Disease Registry, 10-Nov-99
- Post Laundry Facility - December 1999 Quarterly Groundwater Sampling Results, Versar, Inc., 20-Dec-99

2000

- Summary Report Pump Test for Site-Wide Groundwater Investigation, USACE/Dames & Moore, Mar-00
- Architect of Capitol - Work Plan Part II -Quality Assurance Project Plan Remedial Investigation, USACE/Malcolm Pirnie, Mar-00
- Architect of Capitol - Work Plan Part III -HASP Remedial Investigation, USACE/Malcolm Pirnie, Mar-00
- Work Plan Initial Delineation Activities Impacted Solid Waste Management Units, Versar, Inc., 30-Mar-00
- Community Relations Plan, US Army Corps of Engineers ICF Kaiser/General Physics, Jun-00
- Remedial Investigation Work Plan - Former Tank Cleaning Supply Warehouse (FGGM90) Buildings 2240 - 2243 and 2247 - 2249, USACE, Versar, Inc., 04-Jun-00
- Sampling Visits (23 Additional Solid Waste Management Units) Vol I and II, Versar, Inc., 7-Jul-00
- Draft Initial Delineation Report Department of Logistics Tactical & Support Vehicle/Heavy Equipment Maintenance Facility, Versar, Inc., 31-Aug-00
- Draft Initial Delineation Reports Department of Logistics, Storage Services and Supply Division Complex, Pepper Road, Versar, Inc., 12-Sep-00
- Draft Initial Delineation Reports Department of Public Works Storage Yard, 2nd Street, Versar, Inc., 12-Sep-00
- Draft Initial Delineation Reports Directorate of Office Management Complex, 20th Street, Versar, Inc., 12-Sep-00
- Draft Initial Delineation Reports the Photo Lab (Bldg 546) and Former Vehicle Maintenance Shop (Bldg 2227), Versar, Inc., 12-Sep-00
- Draft Initial Delineation Reports Wash Rack Oil/Water Separator at Equipment Concentration Station 86 (Bldg 2120C), Heavy Equipment and Generator Maintenance Shop (Bldg 2128) and Forensic Toxicology Drug Testing Lab (Bldg 2490), Versar, Inc., 12-Sep-00
- Draft Initial Delineation Reports Equipment/Vehicle Storage Yard Wash Rack System (Bldg 1007), 20th Street, and Dept. of Public Works Storage and Receiving Yard (Bldg 2207), 1st Street, Versar, Inc., 12-Sep-00

2000 (cont.)

- Post Laundry Facility - Comprehensive Site Assessment Volume I of II, Versar, Inc., 20-Oct-00
- Architect of Capitol - Work Plan Part I -Field Sampling Plan Remedial Investigation, USACE/Malcolm Pirnie, Nov-00

2001

- Results from May 2001 Sampling of Monitoring Well MW-4DR - Active Sanitary Landfill, IT Corp/Advanced Infrastructure Management Technologies, Jul-01
- Site Investigation Report - Building 1251 (SWMU 19), Versar, Inc., 13-Jul-01
- Site Investigation Report - Building 2253 (SWMUs 61/62), Versar, Inc., 13-Jul-01
- Site Investigation Report - Building 2482 (SWMU 72), Versar, Inc., 13-Jul-01
- Site Investigation Report - Building 2630 (Wash Rack) SWMU 78, Versar, Inc., 13-Jul-01
- Site Investigation Report - Wash Rack at 4th and Y Streets, SWMUs 143/144, Versar, Inc., 13-Jul-01
- Site Investigation Report - Former Wash Pack and Oil Separator at Building 940 (SWMUs 12/13), Versar, Inc., 14-Aug-01
- Site Investigation Report - Building 2213 SWMU 38, Versar, Inc., 14-Aug-01
- Site Investigation Report - Building 2220 SWMU 42, Versar, Inc., 14-Aug-01
- Site Investigation Report - Building 8688 SWMUs 129/130, Versar, Inc., 14-Aug-01
- Site Investigation Report - Building 6513, SWMU 150, Versar, Inc., 14-Aug-01
- Site Investigation Report - Building 2240 SWMUs 45/46, Versar, Inc., 14-Sep-01
- Site Investigation Report - Building 2276 (SWMUs 63/64), Versar, Inc., 14-Sep-01
- Site Investigation Report - Building 2286 (SWMUs 66/67), Versar, Inc., 14-Sep-01
- Site Investigation Report - Former Wash Rack at Building 8480 (SWMUs 110/111), Versar, Inc., 14-Sep-01
- Site Investigation Report - Building 8549 SWMUs 121/124, Versar, Inc., 14-Sep-01
- Soil Background Concentration Report, USACE/Malcolm Pirnie, Oct-01
- Architect of Capitol - Remedial Investigation Report Vols I-II, USACE/Malcolm Pirnie, Oct-01
- Site Investigation Report - Building 2121 (SWMUs 29/30), Versar, Inc., 26-Oct-01
- Site Investigation Report - Building 2120C (SWMU 25), Versar, Inc., 30-Oct-01
- Groundwater Remedial Investigation Work Plan Addendum - Active Sanitary Landfill, IT Corp/Advanced Infrastructure Management Technologies, Nov-01
- Site Investigation Report - Building 8485, SWMU 115/116, Versar, Inc., 2-Nov-01
- Site Investigation Report - Building 8486 SWMVs 117/118, Versar, Inc., 2-Nov-01
- Site Investigation Report - Wash Rack Building 8485 SWMU 116A, Versar, Inc., 7-Nov-01
- Site Investigation Report - Building 2724 (SWMUs 80 through 86), Versar, Inc., 7-Dec-01
- Site Investigation Report - Building 4587 SWMO 101/102, Versar, Inc., 7-Dec-01
- Site Investigation Report - Building 4680, SWMU 103, Versar, Inc., 7-Dec-01
- Site Investigation Report - Wash Racks at Building 2728 SWMUs 87, 88, 89, 90, 91, 92, Versar, Inc., 14-Dec-01

2001 (cont.)

- Site Investigation Report - Golf Course Maintenance Area Buildings 8860, 8880, 8890 and 8896, SWMUs 131-133 and 135-137, Versar, Inc., 18-Dec-01

2002

- Post Laundry Facility - Response to USEPA Comments on Final Comprehensive Site Assessment, Versar, Inc., 10-Jan-02
- Architect of Capitol - Quality Control Summary/Analytical Results Vols I-V, USACE/Malcolm Pirnie, Mar-02
- Site Investigation Report - O'Brien Road, USACE, URS, 15-Mar-02
- Solid Waste Management Unit Project Work Plans Data Gap Sites, Versar, Inc., 2-May-02
- Generic Site Safety & Health Plan, USACE/EM Federal, Jun-02
- Site Investigation Report - Building 2266, Versar, Inc., 6-Sep-02
- Former Trap And Skeet Range (20th Street) - Corrective Action Plan, Versar, Inc., 17-Dec-02

2003

- Generic Field Sampling Plan, USACE/EM Federal, Mar-03
- Generic Quality Assurance Plan, USACE EM Federal, Mar-03
- Remedial Investigation Work Plan - Former Motor Pool Maintenance Facility (FGGM86) Building 2286, USACE, Versar, Inc., 02-May-03
- Remedial Investigation Work Plan - Former Heavy Gun Cleaning and Repair Shop (FGGM92) Buildings 2246 and 2253, USACE, Versar, Inc., 21-May-03
- Remedial Investigation Work Plan - Former Nike Missile Control Site (FGGM87) Buildings 1945, 1946, 1957, 1958, 1974, 1976, 1977, 1978 and 1990, USACE, Versar, Inc., 13-Jun-03
- DRMO - Remedial Investigation and Baseline Risk Assessment, URS, USACE, 10-Jul-03
- Remedial Investigation Work Plan - Former Tank Maintenance Facility (FGGM88) Building 2207, USACE, Versar, Inc., 21-Jul-03
- Remedial Investigation Work Plan - Former Tank Maintenance Facility (FGGM89) Building 2217, USACE, Versar, Inc., 25-Jul-03
- Remedial Investigation Work Plan - Golf Course Maintenance Facility Buildings 8860, 8870, 8880, 8890 and 8890A, SWMUs 131-137, Versar, Inc., 28-Oct-03
- Remedial Investigation Work Plan - Golf Course Maintenance Facility Buildings 8860, 8870, 8880, 8890 and 8890A, SWMUS 131-137, USACE, Versar, Inc., 28-Oct-03
- RAB Meeting Minutes, US Army, Sep-96 to 2003
- Partnering Meeting Summaries, US Army, 1997 to 2003
- Field Sampling Plan – Phoenix Military Reservation, Malcolm Pirnie, Oct-03

2004

- Site Specific Work Plan – Architect of the Capitol, Malcolm Pirnie, Oct-04

2005

- Final Work Plan – Phoenix Military Reservation, Malcolm Pirnie, Dec-05

2006

- Final Work Plan – Former Pesticide Shop, URS, Jan-06
- Final RI Work Plan – OU3, Kemron Environmental Services, Mar-06
- Final Historical Records Review, Malcolm Pirnie, May-06
- Final RI Work Plan – OU4, Kemron Environmental Services, May-06

FORT GEORGE G. MEADE and PHOENIX MILITARY RESERVATION

Installation Restoration Program
Site Descriptions

FGGM 05 TROOP BOILER PLANT

SITE DESCRIPTION

The Troop Housing Boiler Plant (Bldg 8481) is located on Simonds Street and remained in operation until 2000. The existing tanks and facility were closed in FY04. There were 4 USTs that contained waste oil and fuel oil with a total capacity of 55,550 gallons. In 1991, a 20,000 gallon, No. 2 fuel oil tank was abandoned in place. Monitoring wells were required by MDE and contamination (#2 fuel oil) was found above soil and groundwater standards. Soil contamination was excavated around the tank at the time of tank removal. MDE issued a NOV in June 1992 for the site, calling for the installation of a recovery system. The system was in operation between 1994 and 1997. Operations were discontinued because the system design could not accommodate changes in groundwater levels. A Solar Powered Oil Removal Skimmer System was installed in August 2001; however this system was shut down in early 2006. Alternative product recovery methods will continue until MDE determines that no additional actions are required. The following tanks were removed as specified:

Tank A	275 gal	Removed Aug 91
Tank B	20,000 gal	Abandoned in place Aug 91
Tank C	15,000 gal	Removed Oct 00
Tank D	15,000 gal	Removed May 98
Tank E	20,000 gal	Removed Oct 00
Tank F	550 gal	Removed May 98

Building 8481 (FGGM-05) was razed in FY04.

CLEANUP STRATEGY

This site is included in a PBC awarded in FY05. The PBC will take this site through RC. Comprehensive expansion master plan calls for the relocation of the military clothing store to this location (land re-use is commercial).

STATUS

REGULATORY DRIVER: RCRA I

RRSE: High

CONTAMINANTS OF CONCERN:
#2 Fuel Oil

MEDIA OF CONCERN:
Groundwater

Phases	Start	End
ISC	199103	199203
INV	199204	199205
CAP	199206	199207
DES	199208	199212
IMP(C)	199407	199512
IMP(O)	199512	201009

RIP DATE: 199512

RC DATE: 201009

FGGM 07 DRMO DRUM SITE

SITE DESCRIPTION

During the 1995 construction of a new building at the DRMO scrap yard, a large number of metal drums containing unknown substances were discovered. Excavation operations discovered approximately 190 drums, four transformers/electrical boxes, and seven decontamination drums. A groundwater plume beneath the burial area extends hundreds of feet south of the source onto Department of Interior property. Most recent investigations have delineated the plume. A draft feasibility study evaluating several remedial alternatives was published in 2004.

CLEANUP STRATEGY

This site is included in a PBC awarded in FY05. The PBC will take this site through RIP/RC.

A revised feasibility study will be submitted and groundwater remediation is likely.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: High

CONTAMINANTS OF CONCERN:
VOCs

MEDIA OF CONCERN:
Groundwater

Phases	Start	End
PA	199205	199405
SI	199205	199405
RI/FS	199409	200709
RD	200409	200804
IRA	199503	199709
RA(C)	200409	200809
RA(O)	200409	201309

RIP DATE: 200409

RC DATE: 201309

FGGM 13

PESTICIDE SHOP BLDG 6621

SITE DESCRIPTION

The former Pesticide Shop, Building 6621, is located south of the Fort Meade golf course, at the intersection of York Avenue and Gordon Street. The site was used as a pesticide shop between 1958 and 1978. During this time-frame it was also used as a maintenance facility for lawn mowers, tractors, and other landscaping equipment. Building 6621 was demolished and the site was graded in 1996.

Pesticides stored at the building included malathion (CAS No. 121-75-5), diazinon (CAS No. 333-41-5), and baygon (CAS No. 114-26-1). All three of these chemicals are on the USEPA Region III risk-based concentration (RBC) table. Based on the soil sampling and analysis results from SI level studies, the site appears to be impacted from past practices. Potential soil contaminants of concern include pesticides and metals. The following lists chemicals that have exceeded RBCs based on past studies:

chlordane, alpha-chlordane, gamma-chlordane, 4,4'-DDD, 4,4'-DDT, heptachlor, dieldrin, 4,4'-DDE, 2,4-D, arsenic and mercury.

During the SI work, neither the horizontal or vertical extent of these chemicals was determined in soil. Groundwater was not assessed. Additionally, the numerous RBC exceedances beyond the immediate vicinity of where the pesticides were reported to have been stored and handled suggests that site grading activities may have spread contamination at the site.

CLEANUP STRATEGY

Because the nature and extent of potential chemical contaminants has not been determined, the proposed plan includes execution of a remedial investigation. Based on current understanding of contaminant levels remedial action in the form of a soil removal (625 cy) remains a viable option.

STATUS

REGULATORY DRIVER:
Safe Drinking Water Act

RRSE: Low

CONTAMINANTS OF CONCERN:
Pesticides, Metals

MEDIA OF CONCERN: Soil

Phases	Start	End
PA	199701	199704
SI	199701	199704
RI/FS	200410	200709
RD	200710	200804
RA(C)	200805	200809

RC DATE: 200809

FGGM 17

CLOSED SANITARY LANDFILL

(Page 1 of 2)

SITE DESCRIPTION

The closed sanitary landfill (CSL) was constructed as an unlined facility in 1958. The trench fill method was used from 1958-1976 and the area fill method was used from 1976-1996 when that portion of the landfill was officially closed and capped. This site was one of four sites which were scored resulting in Fort Meade being placed on the NPL.

A groundwater monitoring program for the Upper Patapsco (water table) and Lower Patapsco (confined) Aquifers was initiated as part of the RCRA closure to ensure that leachate from the landfill did not impact groundwater. Analytical data from the semi-annual groundwater samples collected since December 2000 indicated several wells showing statistically significant increases in concentrations of constituents. In addition, VOCs, total polychlorinated biphenyls (PCBs), and three metals (arsenic, beryllium and thallium) have been locally detected at concentrations exceeding their respective maximum contaminant levels (MCLs). Fewer organic compounds were detected in the lower aquifer relative to the upper aquifer, and at generally lower concentrations.

As outlined in the April 4, 2001 correspondence from MDE to Fort Meade, “the Army must characterize the nature and extent of contamination of the release by installing additional wells as necessary.” MDE recommended, at a minimum, the installation of eight wells (three in the Upper Patapsco Aquifer and five in the Lower Patapsco) as a starting point in the delineation of groundwater contamination and the refinement of current understanding of groundwater flow. However, in the case of the three shallow wells proposed by MDE to be installed in the off-site Amtrak railroad maintenance area, the proposed locations did not seem appropriate for this investigation. Based on a site visit (August 28, 2001) and inspection of the surrounding topography, MDE concurred that the proposed shallow well locations would not serve the purpose of monitoring shallow groundwater downgradient of the CSL. A risk assessment is currently being performed to evaluate potential risks to human health and environment.

The draft remedial investigation was completed in 2006.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: High

CONTAMINANTS OF CONCERN:
VOCs, Metals, Pesticides

MEDIA OF CONCERN: Soil,
Groundwater

Phases	Start	End
PA	198011	199212
SI	198011	199212
RI/FS	200109	200709
IRA	199806	199812
LTM	200710	203610

RC DATE: 200709

FGGM 17

CLOSED SANITARY LANDFILL

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CLEANUP STRATEGY

The RI/FS will be completed. Discussions with USEPA Region III suggest that land use controls are a viable option for the site if the Army can document a closed exposure pathway. Long-term management will continue.

FGGM 33

BATTERY SHOP BLDG 2283

SITE DESCRIPTION

Building 2283, constructed in 1941, was originally used as a motor repair shop or storage facility. The site was used for battery maintenance and repair operations from 1982 to 1990. From 1982-1985, battery acid was drained from a bermed area on the floor to soils behind the building. A neutralization tank containing limestone chips was installed behind the building in 1985 and for two years battery acid was discharged into the tank. Battery acid discharge ended in 1987; however, battery rinsing and cleaning operations continued with the discharge going into the ground. All battery operations ended in July 1990. Initial soil samples taken in 1990 and 1991 showed elevated lead levels, constituting a removal action in 1992. Site characterization began in March 1993 and interim remedial actions were completed by the end of 1993. A follow-up SI was completed in FY99/00 to aide in site closure.

STATUS

REGULATORY DRIVER: Other

RRSE: High

CONTAMINANTS OF CONCERN:
Lead

MEDIA OF CONCERN: Soil,
Groundwater

Phases	Start	End
PA	199112	199303
SI	199112	199405
RI/FS	200212	200409
IRA	199304	199405

RC DATE: 200409

CLEANUP STRATEGY

Closure documentation has been completed and is awaiting approval.

FGGM 47

POST LAUNDRY BLDG 2250

SITE DESCRIPTION

Building 2250 was constructed in the 1940s during World War II and remained a laundry/dry cleaning facility until the mid-1980s. After its closure, the existing facility was converted to a recycling center. Initial soils investigations indicated elevated levels of tetrachloroethylene (PCE) (2,000 ppb) were present in soils; 45,000 ppb in groundwater; and 410 ppb in surface water. A soil gas survey was completed in 1990 to further define the extent of contamination. Due to the soil gas results, vadose zone soil sampling and groundwater sampling was scheduled. Groundwater monitoring wells were not installed because groundwater was not encountered above a clay layer found throughout the site. Based on this study, there appeared to be no significant impact to the substrate and the nearest shallow groundwater had not been affected. In 1994, MDE issued a corrective action order requiring Fort Meade to perform an investigation and to delineate the nature and extent of the problem. A comprehensive site investigation was completed to comply with the order.

A remedial investigation is currently underway.

CLEANUP STRATEGY

This site is included in a PBC awarded in FY05. The PBC will take this site through ROD/DD. It is expected that groundwater contamination will likely require remedial action. In-situ groundwater treatment will likely be evaluated as a remedial alternative.

STATUS

REGULATORY DRIVER:
Clean Water Act

RRSE: High

CONTAMINANTS OF CONCERN:
PCE

MEDIA OF CONCERN:
Groundwater

Phases	Start	End
PA	199005	199006
SI	199005	199006
RI/FS	199108	200709
RD	200409	200803
RA(C)	200409	200809
RA(O)	200409	201309

RIP DATE: 200409
RC DATE: 201309

FGGM 74

ARCHITECT OF THE CAPITAL

SITE DESCRIPTION

The Library of Congress (LOC) Campus Facility is an area along the south border of Fort Meade, situated generally between State Route 32 and Rock Avenue and between Taylor and Pepper Roads. This area was authorized by Congressional action for transfer in 1994 from the Department of the Army to the Architect of the Capitol for the needs of the LOC and other agencies. The property was deeded to the Architect of the Capital in October 1994, for the future construction of archive facilities for the Library of Congress. The area consists of warehouse facilities, USTs, motor pool and new archive facilities. The Army is responsible for investigating the environmental condition of the property and to restore the property as necessary in accordance with existing laws and regulations.

In 2001, a remedial investigation was performed, to characterize the nature and extent of contamination and to quantify the risk to human health and ecological receptors. The investigation identified SVOCs, metals, and a pesticide at concentrations exceeding risk screening criteria. The human health risk assessment identified only a non-carcinogenic risk, and only for a very conservative exposure scenario (future residential development of the site, with assumed ingestion of groundwater). The ecological risk assessment concluded that the contaminants identified at the site are not considered to pose significant risks to plants, invertebrates, or wildlife, with the possible exception of aluminum and barium in surface water. Regulatory comments on the draft RI have outlined the need for additional characterization at the site. Additional characterization has been completed. The RI report is undergoing review.

CLEANUP STRATEGY

An RI/FS is underway at this site. The Army assumes, based on draft RI data and the assessment of risk identified above, that industrial land use controls with groundwater monitoring may be a viable option for the out years. Recurring reviews will be required.

STATUS

REGULATORY DRIVER:
Clean Water Act

RRSE: High

CONTAMINANTS OF CONCERN:
SVOCs, Metals, Pesticides

MEDIA OF CONCERN: Soil,
Groundwater

Phases	Start	End
PA	199510	199604
SI	199605	199606
RI/FS	200005	200709
LTM	200710	202210

RC DATE: 200709

FGGM 78 GRANITE NIKE

SITE DESCRIPTION

This is a former Nike-Hercules Missile Control site located in Granite, MD and was established in the 1950s. The former control facility was leased to the Maryland National Guard in the early 1970s and returned to the Army in the late 1980s. The facility sat idle for several years before funding and other real property issues could be resolved regarding the returning of the property to Fort Meade. Fort Meade has investigated the property and removed all known underground and above ground storage tanks, performed an asbestos and lead survey of all the buildings and performed a comprehensive site investigation on the groundwater and soil. A leach field removal project has been completed.

MDE walked the site in August 2002 and verbally requested additional sampling. This site is currently undergoing assessment for close out.

STATUS

REGULATORY DRIVER: RCRA C

RRSE: High

CONTAMINANTS OF CONCERN:
Metals

MEDIA OF CONCERN:
Groundwater

Phases	Start	End
RFA	199610	199709
CS	199810	199912
RFI/CMS.....	199912	200103
DES	200110	200111
CMI(C).....	200110	200112
LTM	200212	200401

RC DATE: 200112

CLEANUP STRATEGY

A request has been submitted to MDE for site closure.

FGGM 83 TRAP AND SKEET RANGE

SITE DESCRIPTION

This site (~66 acres) was discovered during an Environmental Baseline Survey. In September 1998, a contract was awarded to investigate the site. Since that time, two separate SIs have been conducted. Both studies revealed the presence of lead and PAHs above the risk-based concentration levels.

CLEANUP STRATEGY

This site is included in a PBC awarded in FY05. The PBC will take this site through RIP/RC.

RI is underway.

STATUS

REGULATORY DRIVER:
Clean Water Act

RRSE: High

CONTAMINANTS OF CONCERN:
Metals, PAH

MEDIA OF CONCERN: Soil,
Sediment, Surface Water

Phases	Start	End
PA	199901	199905
SI	199901	199905
RI/FS	199909	200609
RD	200409	200703
IRA	200305	200306
RA(C)	200409	200706
RA(O)	200506	201206

RIP DATE: 200506

RC DATE: 201206

FORMER MOTORPOOL MAINTENANCE FACILITY

SITE DESCRIPTION

The Former Motorpool Maintenance Facility (Bldg 2286) was identified in a 1994 solid waste management unit study and further evaluated in two separate SIs during FY99 and FY00 respectively. Historical review of records has indicated that this site was constructed as a motor pool maintenance facility and therefore is being investigated under these criteria. In FY04, remedial investigation fieldwork for Bldg 2286 commenced. Preliminary data suggests that a groundwater plume extends to and around Bldg 2276. The size of the plume is roughly double what was anticipated. VOCs are present in the groundwater plume in the ppm range. Metals and TPH in soil have been identified in SI level investigations.

CLEANUP STRATEGY

This site is included in a PBC awarded in FY05. The PBC will take this site through ROD/DD. It is expected that groundwater contamination will likely require remedial action. In-situ groundwater treatment will likely be evaluated as a remedial alternative.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: Low

CONTAMINANTS OF CONCERN:
VOCs, Heavy Metals, TPH

MEDIA OF CONCERN: Soil,
Groundwater

Phases	Start	End
PA	199812	199902
SI	199812	199902
RI/FS	200306	200709
RD	200710	200805
RA(C)	200806	200809
RA(O)	200810	201309

RIP DATE: 200810

RC DATE: 201309

FGGM 87

FORMER NIKE CONTROL SITE

SITE DESCRIPTION

The Former Nike Fire Control Site was constructed in 1955, and supported Nike missile activities until 1972. The four building complex is presently used as the Directorate of Information Management for Fort Meade. This site was identified in a 1994 solid waste management unit study and further evaluated in two separate SIs during FY99 and FY00 respectively. Investigations identified exceedences of SVOCs, arsenic and TPH in soils, and VOCs, SVOCs, metals, and TPH in groundwater.

CLEANUP STRATEGY

This site is included in a PBC awarded in FY05. The PBC will take this site through RIP/RC.

An RI is underway.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: Medium

CONTAMINANTS OF CONCERN:
SVOCs, VOCs, Metals, TPH

MEDIA OF CONCERN: Soil,
Groundwater

Phases	Start	End
PA	199812	199902
SI	199812	199902
RI/FS	200307	200609
RD	200505	200709
RA(C)	200505	200809
RA(O)	200505	201309

RIP DATE: 200505

RC DATE: 201309

FGGM 88

FORMER TANK MAINTENANCE FACILITY

SHOP-1

SITE DESCRIPTION

This site was identified in a 1994 solid waste management unit study and further evaluated in two separate SIs during FY99 and FY00 respectively. Originally constructed to support tank maintenance activities, this facility is a warehouse. The storage and receiving yard is located approximately 150 feet southwest of the intersection of 1st Street and Chisholm Avenue. Current land use at the site is for maintenance. Future land use is administration.

The site includes Building 2207 (SWMU 37, Storage and Receiving Warehouse), Building 2201 (Storage and Supply Warehouse), Building 2206 (offices), Building 2204 (storage building), and Building 2200 (metal canopy for outdoor storage). Constructed in 1918, Building 2207 was used as a tank maintenance facility prior to 1973. Since at least the mid-1980s, it has been in use as a receiving and storage facility. It is currently used for receiving materials for distribution to other facilities (main floor), and storing supplies such as filters, light bulbs, and pipe clamps (upper floor). The grounds are also used for storage of construction materials, refrigerators, non-PCB-containing transformers, and fluorescent light bulbs. Records indicate that a spill had occurred from a transformer in the yard; however, the material was tested and found not to contain PCBs.

Investigations conducted at the site to date identified exceedances of screening criteria for the following compounds in soil: arsenic, TPH- diesel; and groundwater: arsenic, and TPH.

CLEANUP STRATEGY

This site is included in a PBC awarded in FY05. The PBC will take this site through ROD/DD. It is expected that soil contamination will likely require remedial action. Soil excavation along with in-situ treatment will likely be evaluated as a remedial alternative. Additionally, groundwater monitoring may be likely for several years to monitor potential migration of contaminants to groundwater.

An RI is underway.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: High

CONTAMINANTS OF CONCERN:
Metals, TPH

MEDIA OF CONCERN: Soil,
Groundwater

Phases	Start	End
PA	199812	199902
SI	199812	199902
RI/FS	200309	200709
RD	200409	200804
RA(C)	200409	200809
RA(O)	200809	201309

RIP DATE: 200809

RC DATE: 201309

FGGM 89 FORMER TANK MAINTENANCE FACILITY SHOP-2

SITE DESCRIPTION

The Department of Logistics (DOL) Electric Shop Building 2217, SWMU 39 and the Department of Public Works (DPW) Storage Yard were located on 2nd Street between Pepper Road and Chisholm Avenue. Future land use at the site will be administrative/recreational.

Building 2217 was located in the southeast corner of the site. A former wash rack (SWMU 41) and a former oil/water separator (SWMU 40) were located in the northwest corner of the site. The asphalt and gravel yard is currently used for storage of electrical transformers (non-PCB), electrical cables, boilers, water heaters, dishwashers, motors, and other equipment and machinery.

Constructed in 1918, Building 2217 was used as a tank maintenance facility until 1973. The building is currently used for storage of military vehicles, equipment, and small motors. The associated wash rack was used to wash vehicles and construction equipment; waste wash water was discharged to the oil/water separator and then to the sanitary sewer system. The wash rack and oil/water separator were demolished and removed in 1999 or 2000. The building was demolished in 2004.

Investigations conducted at the site to date identified exceedances of screening criteria for the following compounds: in soil: arsenic, TPH-diesel; and in groundwater: arsenic, beryllium, copper, lead, thallium, VOCs, TPH-gasoline and TPH-diesel.

CLEANUP STRATEGY

This site is included in a PBC awarded in FY05. The PBC will take this site through ROD/DD. It is expected that soil contamination will likely require remedial action. Soil excavation along with in-situ treatment will likely be evaluated as a remedial alternative. Additionally, groundwater monitoring may be likely for several years to monitor potential migration of contaminants to groundwater.

An RI is underway.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: Low

CONTAMINANTS OF CONCERN:
Metals, TPH

MEDIA OF CONCERN: Soil,
Groundwater

Phases	Start	End
PA	199812	199902
SI	199812	199902
RI/FS	200309	200709
RD	200409	200804
RA(C)	200409	200809
RA(O)	200409	201309

RIP DATE: 200409

RC DATE: 201309

FGGM 90

FORMER TANK CLEANING SUPPLY WAREHOUSE

(Page 1 of 2)

SITE DESCRIPTION

The Department of Logistics (DOL) Storage Services and Supply Division Complex are located in the northwest quadrant of the intersection of Pepper Road and Rock Avenue. Current and anticipated future land use is for maintenance operations.

The complex includes Buildings 2240 (SWMUs 45, 46), 2241 (SWMUs 47, 48), 2242 (SWMUs 49, 50), 2243, 2247, 2248 (SWMUs 51, 52), and 2249 (SWMUs 53, 54). Building 2240 (DOL Laundry and Dry Cleaning Services) is a separate single-story brick structure. Buildings 2241, 2242, and 2243 are connected in sequence and are elevated on wooden piers. Buildings 2247, 2248, and 2249 are smaller, wooden garage-type structures located behind the larger buildings. Other features on the site include a propane storage pen (Building 2247A), a flammable gas storage pen (Building 2248A), an empty compressed gas storage pen north of Building 2249, and a former 1,000-gallon AST storing No. 2 fuel oil located behind Building 2242, removed in 1995.

Constructed in 1934, Building 2240 has been used as a storage and supply facility since construction in 1934, and currently is a receiving/transfer location for computer equipment and laundry/dry cleaning. Buildings 2241 and 2242 were constructed in 1918 and have always been used for receiving and short-term storage of supplies and materials before shipping. The receiving areas stored a variety of lube oil cleaners, degreasers, carbon removers, detergent cleaners, and waxes; vehicle batteries and electronic components have also been stored recently. Building 2247, constructed in 1941, currently stores surplus office furniture but formerly stored hazardous materials. Buildings 2248 and 2249, also constructed in 1941, were formerly used as standard ordnance shops and as storehouses. Both are currently used for furniture storage. A railroad line once crossed the site, but is not currently apparent.

Investigations conducted at the site identified contaminants in groundwater above RBCs and/or MCLs. In soils, only arsenic was found above RBCs in very limited sample locations.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: Medium

CONTAMINANTS OF CONCERN:
PAHs, TPH, Inorganics

MEDIA OF CONCERN: Soil,
Groundwater

Phases	Start	End
PA	199812	199902
SI	199812	199902
RI/FS	200307	200709
RD	200409	200804
RA(C)	200409	200809
RA(O)	200409	201309

RIP DATE: 200409

RC DATE: 201309

FGGM 90 FORMER TANK CLEANING SUPPLY WAREHOUSE (Page 2 of 2)

CLEANUP STRATEGY

This site is included in a PBC awarded in FY05. The PBC will take this site through ROD/DD. It is expected that groundwater contamination will require remedial action. In-situ groundwater treatment will likely be evaluated as a remedial alternative.

The RI is underway.

FGGM 91

FORMER MISSILE REPAIR SHOP

SITE DESCRIPTION

Building 2220, located approximately 150 feet north of the intersection of 2nd Street and Pepper Road, is used as an electronic maintenance and equipment calibration shop. It was also used in the 1960s as a missile repair shop, warehouse and troop-training center. Current and future land uses at the site are designated as administrative/recreational.

No hazardous chemicals are currently in use at the facility. Past activities in the building have used solvents and produced solvent waste. Small amounts of cleaning solvent and gasoline were formerly stored in a shed outside the building. Two fuel oil USTs were formerly located at the south side of the building; one was removed in 1992, and the other was removed and replaced in 1988 then removed in 1997. During the 1988 UST removal, corrosion holes were noted at the end of the tank. EMO records include a report of a 1-gallon spill of fuel oil in 1993 at the site.

CLEANUP STRATEGY

This site is included in a PBC awarded in FY05. The PBC will take this site through ROD/DD. An RI is underway. NFA is anticipated for this site.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: Medium

CONTAMINANTS OF CONCERN:
SVOCs, VOCs, Inorganics,
Petroleum Hydrocarbons

MEDIA OF CONCERN: Soil,
Groundwater

Phases	Start	End
PA	199812	199902
SI	199812	199902
RI/FS	200302	200709
RD	200409	200709
RA(C)	200409	200709
RA(O)	200409	200709

RIP DATE: 200409

RC DATE: 200709

FGGM 92

FORMER HEAVY GUN CLEANING/REPAIR

(Page 1 of 2)

SITE DESCRIPTION

The Department of Logistics Tactical & Support Vehicle/Heavy Equipment Maintenance Facility, Building 2246 (SWMUs 55-58), is located at the southwest corner of the intersection of Pepper Road and Huber Road. Building 2253 (SWMUs 61-62) is located approximately 400 feet northeast of the intersection of Rock Avenue and Huber Road. Current and future land uses at the site, according to the Fort George G. Meade Land Use Plan, designates the area as industrial.

The maintenance facility includes two main structures, Buildings 2246 (SWMUs 55-56), which includes a wing containing vehicle service bays, and 2246D, and two smaller structures, Buildings 2244 and 2245. A wash rack (SWMU 58) and associated oil/water separator (SWMU 57) are present at the southwest side of Building 2246D. Other features at the site include a relatively new 800-gallon above-ground used oil storage tank at the eastern corner of Building 2246D, an out-of-service wash rack on the north side of the Building 2246 vehicle maintenance wing, and an out-of-service fuel pump on the north side of the vehicle maintenance wing. The fuel pump formerly dispensed fuel from an underground diesel fuel storage tank, which was removed in the 1990s.

Building 2246 has been used as a warehouse and vehicle and equipment maintenance facility since 1934; it was also used as a heavy gun repair shop from 1934 until the mid-1980s, and a portion of the building is also believed to have been used as a tank repair shop in the past. The facility currently provides all levels of maintenance and repair of heavy equipment and base vehicles.

Building 2253 was constructed in 1934, and has been used for vehicle maintenance in the past. Since 1992, the Director of Community Activities has used the facility for storage and maintenance of grounds keeping equipment and supplies (e.g., tractors, gas cylinders); prior to 1992 it was used by the DOL as a warehouse. It was transferred back to the DOL in 2001. The north end of the building interior is currently unoccupied and secured because of the presence of lead paint and asbestos-containing materials. In 2005 DOL vacated the building. It is currently scheduled for renovation for administrative use.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: High

CONTAMINANTS OF CONCERN: SVOCs, VOCs, Heavy Metals TPH

MEDIA OF CONCERN: Soil, Groundwater

Phases	Start	End
PA	199812	199902
SI	199812	199902
RI/FS	200307	200709
RD	200409	200804
RA(C)	200409	200809
RA(O)	200809	201309

RIP DATE: 200809

RC DATE: 201309

FGGM 92 FORMER HEAVY GUN CLEANING/REPAIR (Page 2 of 2)

An outdoor storage locker stores accumulated hazardous wastes, which are transferred to Building 2250 when the locker is full. An 800-gallon AST in the parking lot on the west side of the building serves as a collection point for used oil from vehicle maintenance. A gas cylinder storage cage is located adjacent to the hazardous waste storage locker.

Investigations conducted at the Building 2246 site identified contaminants in groundwater above RBCs and/or MCLs for VOCs, SVOCs, Metals, and above MDE screening criteria for TPH. In soils, arsenic above RBCs and TPH above MDE cleanup criteria in some locations.

Building 2253, investigations conducted at the site identified contaminants in groundwater above RBCs and/or MCLs for Arsenic and SVOCs and above MDE screening criteria for TPH in very limited sampling points. In soils, arsenic levels were above RBCs and TPH was above MDE cleanup criteria in some locations and herbicides were above RBCs in only one sample.

CLEANUP STRATEGY

This site is included in a PBC awarded in FY05. The PBC will take this site through ROD/DD. An RI is underway. It is expected that groundwater contamination will require remedial action. In-situ groundwater treatment for the VOCs along with Natural Attenuation for the TPH contamination will likely be evaluated as remedial alternatives.

FGGM 93

MANOR VIEW DUMP SITE

(Page 1 of 2)

SITE DESCRIPTION

The Manor View Dump Site is located in the northern portion of Fort Meade close to the intersection of MacArthur and Reece Roads. Manor View Elementary School bounds the site to the east and housing developments bound the site to the north, south, and west.

While Picerne Military Housing was moving earth as part of the housing privatization initiative at Fort Meade (Neighborhood No. 1), a 1940's era (based on dated recovered materials in the dump) waste dump was uncovered on the property immediately adjacent to the Manor View Elementary School. The subsequent PA/SI (spring FY03) discovered that the dump site extended beyond the planned limits of the housing area and onto the Manor View Elementary School property. The waste material consists of glassware, toiletries, paper products, wood, clothing, food containers, polyvinyl chloride pipe, and cinder blocks. The waste is mixed with black stained soil. Reportedly, historic aerial photographs show an incinerator in the vicinity and ash may have been disposed of in the dump. Surface soil samples collected in the discovery area and the schoolyard revealed that benzo (a) pyrene and arsenic exceeded RBCs. TPH-DRO exceeded the MDE Cleanup Standard in both surface and subsurface soil. The soil mixed with the waste did not exhibit RCRA waste characteristics. RBCs were exceeded at the surface and down to 12 feet below ground surface (bgs).

Since the PA/SI was limited to surface and subsurface soil in and around the dump area, the RI is underway to evaluate groundwater, soil gas, sediment/surface water, and soil. The size of the dump is estimated to be 10 acres. Preliminary groundwater sample results show that VOCs, metals, and TPH-DRO exceed screening criteria. The depth to groundwater averages 36 feet bgs. Soil gas samples exceed vapor intrusion concentrations for VOCs in buildings and methane levels are in the combustible range. Due to public safety concerns stemming from the soil gas data additional sampling was performed focusing on indoor air quality sampling, sub-slab air sampling, sub-slab vacuum testing, and ambient air quality sampling at the school near the site. Methane and other potential contaminants were not elevated in the sub-slab zone or in the indoor air beyond ambient levels or background levels detected in the rest of the school's indoor air. The

STATUS

REGULATORY DRIVER: CERCLA

RRSE: High

CONTAMINANTS OF CONCERN:
VOCs, TPH, PAHs, Inorganics

MEDIA OF CONCERN: Soil,
Groundwater, Soil Gas

Phases	Start	End
PA	200301	200302
SI	200303	200304
RI/FS	200307	200709
RD	200710	200804
IRA	200507	200808
RA(C)	200804	200808
RA(O)	200808	202308

RIP DATE: 200808

RC DATE: 202308

school's concrete slab foundation appears to be acting as an effective barrier to vapor intrusion.

FGGM 93

MANOR VIEW DUMP SITE

(Page 2 of 2)

Data collected near the neighborhood to the west of the site showed increased levels of methane in the soil. This has led to the installation of a passive vent trench and subsequent upgrade to active system, on the west side of the dump area to vent methane as an interim measure. Families were evacuated from 20 military housing units and the utilities in these units were shut off to remove ignition sources in 2005.

Installation and sampling of wells during summer 2004 determined the groundwater is impacted by solvents. Interim actions have not been determined to have effectively controlled the migration of methane towards military housing.

CLEANUP STRATEGY

Complete RI/FS. Remedial action will be required in the form of a soil vapor extraction system to handle methane and organic vapors and MNA for groundwater. Organic vapors were detected above the screening level for vapor intrusion into buildings. Current data suggests indoor air is comparable to ambient background conditions for compounds detected. Methane is being released in an uncontrolled fashion from the ground surface and is accumulating in the monitoring well headspaces. Since the shallow groundwater is not used for drinking water in the vicinity of the dump site and breakdown products have been found, MNA could be a viable option. Land use controls will be required to prevent excavation into the waste. Recurring reviews will be required.

PBC AT MEADE PBC AT MEADE

SITE DESCRIPTION

The PBC covers sites FGGM 05, 07, 47, 83, 86, 87, 88, 89, 90, 91, and 92.

This 'site' is only used to track PBC funding and is not an actual site.

CLEANUP STRATEGY

STATUS

REGULATORY DRIVER:

RRSE: Low

CONTAMINANTS OF CONCERN:

#2 Fuel Oil, VOCs, PCE, Metals, PAH, Heavy Metals, TPH, SVOCs, Inorganics, Petroleum Hydrocarbons

MEDIA OF CONCERN: Soil, Groundwater, Sediment, Surface Water

Phases	Start	End
PA	199809	199810
RI/FS	200209	200709
RA(C)	200506	200809
RA(O)	200506	201209

RIP DATE: 200509

RC DATE: 201209

PMR-001 FORMER SEPTIC SYSTEM

SITE DESCRIPTION

The site is an old Nike-Hercules missile facility located in Phoenix, MD. The site was characterized and found to have contaminated groundwater with TCE. The drinking water supply for the local residents consisted of wells which were contaminated. Bottled water was provided as an interim measure pending the construction of a community deep well system for the residents of the surrounding area at the time of installation. Funding for the county to maintain the community well system for ten years was calculated and drawn up as a legal agreement between DA and Baltimore County. FY95 ER,A funds covered the cost of the agreement. Subsequently, a remedial investigation was started at the site to evaluate the nature and extent of contamination beyond the facility property and within the facility boundary.

CLEANUP STRATEGY

Complete the RI. A feasibility study will be completed to evaluate possible remedial alternatives for groundwater. Based on current knowledge of groundwater contamination, in-situ groundwater remediation remains a viable option.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: High

CONTAMINANTS OF CONCERN:
VOCs, TPH

MEDIA OF CONCERN:
Groundwater

Phases	Start	End
PA	198206	198501
SI	198206	198501
RI/FS	200307	200709
RD	200710	200806
IRA	199304	199307
RA(C)	200806	200809
RA(O)	200809	201309

RIP DATE: 200809

RC DATE: 201309

IRP No Further Action Sites Summary

AEDB-R #	Site Title	Documentation/Reason for NFA	NFA Date
FGGM 03	Water Treatment Plant Bldg 8688	Not Eligible For ER,A/BRAC Funding	199408
FGGM 08	Comp Ammo Supply Point #1	Other	199903
FGGM 11	Chemical Weapons	Study Completed, No Cleanup Required	199708
FGGM 14	Hazardous Waste Storage Facility	Not Eligible For ER,A/BRAC Funding	199410
FGGM 18	ASP#2	Not Eligible For ER,A/BRAC Funding	199605
FGGM 19	Adv. Wastewater Treatment Facility	Not Eligible For ER,A/BRAC Funding	199410
FGGM 21	Medical Waste Site	All Required Cleanup(s) Completed	199706
FGGM 32	Fire Training Area	Tipton Army Airfield Record of Decision dated 1998	199808
FGGM 33	Battery Shop Bldg 2283	All Required Cleanup(s) Completed	200409
FGGM 36	Photo Labs Bldg 4553, 6530	Not Eligible For ER,A/BRAC Funding Active Photo Lab	199606
FGGM 37	Kimbrough Army Hospital	Not Eligible For ER,A/BRAC Funding Active Facility	199606
FGGM 45	Calibration Lab Building 2220	Not Eligible For ER,A/BRAC Funding Active Facility	199606
FGGM 49	DOL Building 2246	Not Eligible For ER,A/BRAC Funding Active Facility	199606
FGGM 51	Building 2216	Not Eligible For ER,A/BRAC Funding	199606
FGGM 70	Bldg 6513 Indoor Range	Not Eligible For ER,A/BRAC Funding	199606
FGGM 71	Bldg 6512 Ex Indoor Range	Not Eligible For ER,A/BRAC Funding	199606
FGGM 72	98 POL Storage Tanks	Not Eligible For ER,A/BRAC Funding	199701
FGGM 73	Maint. Shops Buildings 85 and 90	SI completed. NFA/no cleanup required	199210
FGGM 75	USTs Prior to 1984	Not Eligible For ER,A/BRAC Funding	199606
FGGM 78	Granite Nike	All Required Cleanup(s) Completed	200112
FGGM 80	Helicopter Hangar 90	Tipton Army Airfield Record of Decision dated 1998	199812
FGGM 82	UXO Removal	Statements of Clearance	199704
FGGM 84	UXO DOI Parcel - PRR North Track	Action Memorandum dated 2001	200304

IRP No Further Action Sites Summary

AEDB-R #	Site Title	Documentation/Reason for NFA	NFA Date
PMR-002	Underground Storage Tank (Removed)	All Required Cleanup(s) Completed	199307
PMR-003	Vehicle Maintenance Shop (Removed)	All Required Cleanup(s) Completed	198704
PMR-004	Generator Building (Removed)	All Required Cleanup(s) Completed	198704

Initiation of IRP: 1991

Past Phase Completion Milestones

1982

- RI/FS, FGGM 08, April

1985

- PA, PMR-002, January
- SI, PMR-002, January
- RI/FS, PMR-002, January
- PA, PMR-003, January
- SI, PMR-003, April
- PA, PMR-004, January
- SI, PMR-004, January

1986

- RD, PMR-003, October
- RD, PMR-004, October

1987

- RA(C), PMR-003, April
- RA(C), PMR-004, April

1990

- PA, FGGM 47, June
- SI, FGGM 47, June

1991

- PA, FGGM 33, March

1992

- RD, PMR-002, June
- ISC, FGGM 05, March
- INV, FGGM 05, May
- CAP, FGGM 05, July
- DES, FGGM 05, December
- PA, FGGM 17, December
- SI, FGGM 17, December

1993

- RA(C), PMR-002, July

1994

- SI, FGGM 33, May
- RI/FS, FGGM 33, September

1994 (cont.)

- IRA, FGGM 33, May
- PA, FGGM 07, May
- SI, FGGM 07, May

1995

- IMP(C), FGGM 05, December

1996

- PA, FGGM 08, April
- SI, FGGM 08, April
- RI/FS, FGGM 08, April
- PA, FGGM 74, April
- SI, FGGM 74, June

1997

- PA, FGGM 13, April
- SI, FGGM 13, April
- PA, FGGM 11, May
- SI, FGGM 11, August
- RFA, FGGM 78, September
- IRA, FGGM 07, September

1998

- PA, PBC at Meade, October
- IRA, FGGM 17, December

1999

- PA, FGGM 86, February
- SI, FGGM 86, February
- PA, FGGM 87, February
- SI, FGGM 87, February
- PA, FGGM 88, February
- SI, FGGM 88, February
- PA, FGGM 89, February
- SI, FGGM 89, February
- PA, FGGM 90, February
- SI, FGGM 90, February
- PA, FGGM 91, February
- SI, FGGM 91, February
- PA, FGGM 92, February
- SI, FGGM 92, February
- RA(C), FGGM 08, March
- PA, FGGM 83, May
- SI, FGGM 83, May
- CS, FGGM 78, December

2001

- RFI/CMS, FGGM 78, March
- DES, FGGM 78, November
- CMI(C), FGGM 78, December

2003

- PA, FGGM 93, February
- SI, FGGM 93, April
- IRA, FGGM 83, June

2004

- LTM, FGGM 78, January

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates: 2007

Projected Construction Completion Date of IRP: To be addressed at future IAP Workshops

Projected Date for Removal from NPL: To be addressed at future IAP Workshops

Schedule for Next Five-Year Review: No DD has been signed yet so no formal schedule set. Assume 5 years beyond 2007.

Estimated Completion Date of IRP (including LTM phase): 2036

FORT GEORGE G. MEADE AND PHOENIX MILITARY RESERVATION IRP SCHEDULE

(Based on current funding constraints)

AEDB-R #	PHASE	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15+
FGGM 13	RD										
	RA(C)										
FGGM 17	LTM										203610
FGGM 47	RD										
	RA(C)										
	RA(O)										
FGGM 74	LTM										202210
FGGM 86	RD										
	RA(C)										
	RA(O)										
FGGM 88	RD										
	RA(C)										
	RA(O)										
FGGM 89	RD										
	RA(C)										
	RA(O)										
FGGM 90	RD										
	RA(C)										
	RA(O)										
FGGM 92	RD										
	RA(C)										
	RA(O)										
FGGM 93	RD										
	IRA										
	RA(C)										
	RA(O)										202308
PBC	RA(C)										
	RA(O)										
PMR-001	RD										
	RA(C)										
	RA(O)										

Prior Years Funds

Total Funding up to FY04: \$72,739K

Year	Site Information	Expenditures	FY Total
FY05	Ft. George G. Meade		
	RI FGGM 13	\$ 181.67K	
	RI FGGM 17	\$ 81.45K	
	RI FGGM 74	\$ 15.00K	
	IRA FGGM 93	\$ 590.00K	
	RI FGGM 93	\$ 318.98K	
	RI PBC at Meade	\$2,903.55K	
	RI RAB/TAPP	\$ 31.17K	
FY05	Phoenix MR		
	RI PMR-001	\$ 20K	4141.82K

Total Prior Year Funds for both installations: \$76,880.82K

Current Year Requirements

Year	Site Information	Requirements	FY Total
FY06	Ft. George G. Meade		
	RI FGGM 13	\$111.00K	
	RI FGGM 17	\$152.00K	
	RI FGGM 74	\$178.43K	
	RI FGGM 93	\$ 95.89K	
	IRA/FS FGGM 93	\$338.38K	
	RA(C) PBC at Meade	\$2,938.17K	
	RA(O) PBC at Meade	\$118.00K	
	RI PBC at Meade	\$ 47.20K	
FY06	Phoenix MR		
	RI PMR-001	\$175.00K	\$4,154.07K

Total Future Requirements for both installations: \$15,002K

Total IR Program Cost (from inception to completion of the IRP): 96,036.89K

FORT GEORGE G. MEADE and PHOENIX MILITARY RESERVATION

Military Munitions Response Program

Total AEDB-R MMRP Sites/AEDB-R sites with Response Complete: 7/0

AEDB-R Site Types

2 Small Arms Ranges

5 Unexploded Munitions/Ordnance

Most Widespread Contaminants of Concern: MEC, Metals

Media of Concern: Soil

Completed REM/IRA/RA:

None

Total MMRP Funding

Prior years (up to FY05): \$4,840.7K

Current Year (FY06): \$28K

Future Requirements (FY07+): \$3496K

Total: \$8364.7K

Duration of MMRP

Year of MMRP Inception: 2002

Year of MMRP RIP/RC: 2017

Year of MMRP Completion Including LTM: 2047

MMRP Contamination Assessment

MMRP Contamination Assessment Overview

The Phase 3 Army Range Inventory was completed at Fort George G. Meade in June 2003. The inventory identified six sites as eligible for MMRP, though two of the sites (FGGM-001-R-01 and FGGM-002-R-01) have since been determined to be BRAC sites, not MMRP sites. The Phase 3 Range Inventory serves as the Preliminary Assessment under CERCLA. A Site Inspection is scheduled for FY07.

MMRP Cleanup Exit Strategy

The installation plans to complete all SIs by September 2007 and execute follow-on phases/actions as required in the individual site cleanup strategies.

2003

- Final Closed, Transferring, Transferred Range/Site Inventory Report for Fort George G. Meade, Malcolm Pirnie, Nov-03

FORT GEORGE G. MEADE and PHOENIX MILITARY RESERVATION

Military Munitions Response Program
Site Descriptions

FGGM-003-R-01 MORTAR RANGE

SITE DESCRIPTION

The former mortar range is approximately 59 acres located in the southwest portion of the installation. The area is positioned north of Mapes Road and bordered by Zimborski Avenue to the east and O'Brien Road to the west. The land is currently used as the installation golf course. The mortar range was identified on a 1924 War Game Map issued by the War Department for Camp Meade. Areas of disturbed ground were identified near the Mortar Range on several aerial photographs from 1938, 1943 and 1952. A 1943 aerial also identifies a training area overlapping the location of the Mortar Range. The range was in use from 1924 until the mid 1940s when the golf course was constructed. It is expected that both live and practice mortar rounds were used during the given time period. EOD reported that a live white phosphorous mortar round was found on the golf course adjacent to Mapes Road during the early 1990s. No additional information on the mortar rounds was available. There have been no additional reports of mortars rounds on or near the golf course.

STATUS

REGULATORY DRIVER:
CERCLA

RAC SCORE: 1 - High

CONTAMINANTS OF CONCERN:
MEC

MEDIA OF CONCERN: Soil

Phases	Start	End
PA	200208	200306
SI	200509	200703
RI/FS	201110	201209
RD	201510	201609
RA(C)	201610	201709
LTM	201710	204709

RC DATE: 201709

CLEANUP STRATEGY

An installation wide SI is being conducted and includes sites FGGM-003-R-01 through FGGM-007-R-01. Based on the results of the SI additional work may be required.

FGGM-004-R-01

GRENADE AND BAYONET RANGE

SITE DESCRIPTION

The grenade and bayonet range was identified on a 1924 War Game Map issued by the War Department for Camp Meade. The 16-acre site is located along the southern installation boundary between Simonds Street and Dull Road and bordered by Grant Road and Zimborski Avenue. The range was used for training purposes from 1924 until the early 1950s. According to DPW, the buildings currently located on the range area were constructed by 1954. The buildings include the Murphy Field House, the Cavalry Chapel, and Barracks. In the early 1990s, EOD reported half shells of grenades and fragments from MK2 (WWII) grenades were found in the area. All of the land formerly used as the grenade and bayonet range is developed and used by Army personnel. It is assumed that the grenades used on site were hand grenades (live, practice and WP).

STATUS

REGULATORY DRIVER:
CERCLA

RAC SCORE: 2 - Serious

CONTAMINANTS OF CONCERN:
MEC

MEDIA OF CONCERN: Soil

Phases	Start	End
PA	200208	200306
SI	200509	200703
RI/FS	201110	201209
RD	201510	201609
RA(C)	201610	201709
LTM	201710	204709

RC DATE: 201709

CLEANUP STRATEGY

An installation wide SI is being conducted and includes sites FGGM-003-R-01 through FGGM-007-R-01. Based on the results of the SI additional work may be required.

FGGM-005-R-01 PISTOL RANGE A

SITE DESCRIPTION

Pistol Range A is a former small arms range on the east side of Fort Meade. The 4-acre site is located south of Reece Road and directly west of Route 175. Chisholm Avenue runs north south through the former range. There were several structures on the site including buildings 2821-2826 and 899. The range was identified on a 1924 War Game Map issued by the War Department for Camp Meade. Based on the operation dates of the other ranges found on the War Game Map, it is assumed that the pistol range was in use from 1924 until the early 1940s. It is also assumed that only small arms were used on site but there is no specific information regarding this. There is no information on any UXO responses conducted on-site.

CLEANUP STRATEGY

An installation wide SI is being conducted and includes sites FGGM-003-R-01 through FGGM-007-R-01. Based on the results of the SI additional work may be required.

STATUS

REGULATORY DRIVER:
CERCLA

RAC SCORE: 5 - Negligible

CONTAMINANTS OF CONCERN:
Metals

MEDIA OF CONCERN: Soil

Phases	Start	End
PA	200208	200306
SI	200509	200703
RI/FS	201110	201209
RD	201510	201609
RA(C)	201610	201709

RC DATE: 201709

FGGM-006-R-01 PISTOL RANGE B

SITE DESCRIPTION

The Pistol Range B was identified on a 1924 War Game Map issued by the War Department for Camp Meade. The former small arms range is 18 acres in size. The site is located north of Mapes Road along the western edge of the golf course and adjacent to the former mortar range. Based on the operation dates of the other ranges found on the War Game Map, it is assumed that the pistol range was in use from 1924 until the mid 1940s. It is also assumed that only small arms were used on site but there is no specific information regarding this. The former pistol range is overlain by sections of O'Brien Road, Sanford Road and Building 9705. There is no information on any UXO responses conducted on site.

STATUS

REGULATORY DRIVER:
CERCLA

RAC SCORE: 5 - Negligible

CONTAMINANTS OF CONCERN:

MEDIA OF CONCERN:

Phases	Start	End
PA	200208.....	200306
SI	200509.....	200703
RI/FS	201110.....	201209
RD	201510.....	201609
RA(C)	201610.....	201709

RC DATE: 201709

CLEANUP STRATEGY

An installation wide SI is being conducted and includes sites FGGM-003-R-01 through FGGM-007-R-01. Based on the results of the SI additional work may be required.

FGGM-007-R-01 INACTIVE LANDFILL 2

SITE DESCRIPTION

This 24.7 acre area is part of the general Tipton Maneuver and Buffer Area located in the north-central extreme of the Fort George G. Meade property. This site was addressed as part of FGGM-85 as a BRAC property, however, it will remain Ft. Meade property and will not be transferred. LTM of the Inactive Landfill 2 will be assumed by the MMRP. Other portions of FGGM-85 will remain as a BRAC site.

CLEANUP STRATEGY

An installation wide SI is being conducted and includes sites FGGM-003-R-01 through FGGM-007-R-01. Based on the results of the SI additional work may be required. Yearly inspection of the security fence and signage are required.

STATUS

REGULATORY DRIVER:
CERCLA

RAC SCORE: Moderate Risk

CONTAMINANTS OF CONCERN:

MEDIA OF CONCERN:

Phases	Start	End
PA	198905.....	198911
LTM	199808.....	203608

RC DATE: 198911

Initiation of MMRP: 2002

Past Phase Completion Milestones

1989

- PA, FGGM-07-R-01, November

2003

- PA, FGGM-003-R-01, June
- PA, FGGM-004-R-01, June
- PA, FGGM-005-R-01, June
- PA, FGGM-006-R-01, June

Projected ROD/DD Approval Dates: 2007

Projected Construction Completion: 2017

Schedule for Five Year Reviews: No DD has been signed yet so no formal schedule set. Assume 5 years beyond 2007.

Estimated Completion Date of MMRP including LTM: 2047

FORT GEORGE G. MEADE MMRP SCHEDULE

(Based on current funding constraints)

AEDB-R #	PHASE	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15+
FGGM-003-R-01	RIFS									
	RD									201609
	RA(C)									201709
	LTM									204709
FGGM-004-R-01	RIFS									
	RD									201609
	RA(C)									201709
	LTM									204709
FGGM-005-R-01	RIFS									
	RD									201609
	RA(C)									201709
FGGM-006-R-01	SI									
	RIFS									
	RD									201609
	RA(C)									201709
FGGM-007-R-01	LTM									203608

MMRP Costs

Prior Years Funds

Total Funding up to FY04: \$4,538K

Year	Site Information	Expenditures	FY Total
FY05	SI	\$302.7K	\$302.7K

Total Prior Year Funds: \$4,840.7K

Current Year Requirements

Year	Site Information	Requirements	FY Total
FY06	SI	\$28K	\$28K

Total Future Requirements: \$3,496K

Total MMRP Program Cost (from inception to completion of the MMRP): \$8,364.7K

Community Involvement

Fort Meade has an active established Restoration Advisory Board and meets once each quarter. The board was established in 1995 and currently has eight members.